Abstract

A method of defining a well-formed database system by defining the organization of the data in the database, and by defining the operations for that data, is described. The definition can be used to automatically create and populate the well-formed database system. The well-formed database system conforms to rules of correctness and produces results that conform to the rules. The organization is defined by a data organization definition that specifies tables, their columns, and the relationships between tables. The operations define procedures that operate on the tables and the table columns. Importantly, the operations are defined along with the tables, columns, and relationships, so that the resulting system is well-formed.